

May 1886.

Sir R. S. Ball, *Nova Andromedæ*.

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Adopting a P.M. = $+ 0^s.020$ and $- 0''.24$ we get:—

	^h	^m	^s		[°]	[']	^{''}
Lalande	23	33	12.70		62	27	10.0
Bessel			13.04				12.6
Armagh			12.87				11.3

In addition to these Proper Motions, a number of other more doubtful cases have been found, which are mentioned in the Notes to the new Armagh Catalogue. These are: LL. 4381, 6106, 6254, 6275, 8618, 11374, 14264, 35817, 37766, 44738. These, as well as several stars with Proper Motion announced on a former occasion (*Copernicus*, vol. ii. pp. 148–151) I would recommend to the attention of meridian observers.

Micrometric Observations of Nova Andromedæ, made at the Observatory, Dunsink. By Sir R. S. Ball.

I see that Professor Asaph Hall has made a series of measures to try if *Nova Andromedæ* has an appreciable Parallax. Perhaps it may be of interest in connection with this subject to publish the following measurements which I made here last autumn with the South Equatorial. The instrument and mode of observing have been described in the various parts of the “Dunsink Observations.”

From *Nova Andromedæ* to Star, 11th mag. *s.f.*

	Dist.	Pos.		Dist.	Pos.
1885. 30 Sep.	229.7	156 33	1885. 1 Dec.	228.3	155 35
3 Oct.	230.2	156 25	2 „	229.5	157 3
4 Nov.		156 17	9 „	229.4	156 36
30 „	228.8	155 29			

From *Nova Andromedæ* to Star, 10th mag. *p.*

	Dist.	Pos.		Dist.	Pos.
1885. 21 Sep.	110.0	262 0	1885. 30 Nov.	109.5	260 36
30 „	110.6	261 6	1 Dec.	109.7	261 22
3 Oct.	108.9	261 46	2 „	108.7	262 7
27 „	109.0	262 41	7 „	109.8	260 47
28 „	109.8	263 19	8 „	109.1	261 13
4 Nov.	109.9	262 17	9 „	108.3	261 35

Dunsink Observatory,
1886, May 13.

Observations of the New Star in Orion. By J. E. Gore.

The following are all my observations of this star since January 16, the last observation given in my paper in the *Monthly Notices* for January 1886. The comparison stars are as follows, and their magnitudes were measured for me by Professor Pickering with the meridian photometer at Harvard Observatory:

			Mag.
57 Orionis	5.90
(b) = Lalande 11088	6.09
(c) = D.M. + 20°, 1156	6.57

Observations of Nova Orionis.

Date of Observation.	Estimated Magnitude.	Notes.
1886, Jan. 23	7.5	Moonlight.
Jan. 29	8.3	More than one magnitude less than (c); no moon.
Feb. 3	8.5	Clear moonless sky. <i>Nova</i> about equal to a small star nearly due north of it.
Feb. 10	8 $\frac{3}{4}$	Small with binocular; moonlight.
Feb. 19	8 $\frac{3}{4}$	Faint with binocular; moon rising, 6.55 P.M.
Feb. 22	8.9	Faint with binocular; clear moonless sky.
Mar. 3	9	Faint with binocular; clear moonless sky.
Mar. 6	—	Only seen by glimpses with binocular; clear sky; no moon, 9.25 P.M.
Mar. 25	—	Glimpsed at intervals with binocular; very clear sky; no moon.
April 7	—	Only doubtfully glimpsed with binocular; very clear sky; moon setting.
April 28	—	<i>Nova</i> not visible with binocular; very clear sky.

The above observations were made with the binocular with which the star was discovered. From a comparison of the sky with Argelander's magnitudes, I find that the *minimum visible* of this binocular in a clear moonless sky is 8.9 or 9.0 mag. in the scale of the *Durchmusterung*, so that on March 6 the star could not have been much, if anything, brighter than 9.0 mag. My observations, therefore, show a diminution of light from December 13 to March 6 of about 3 magnitudes. Professor Pritchard finds a decrease of only half a magnitude to March 10 (*Monthly Notices*, March, 1886). Mr. Gemmill, on February 24, estimated the star as 9 $\frac{1}{2}$ magnitude with 3 $\frac{1}{4}$ -inch refractor (*English Mechanic*, April 16, 1886), and in a letter from a well-known observer in America, dated February 5, 1886, he estimated the *Nova* about 8 magnitude at that date. My observations have also been confirmed by Mr. H. M. Parkhurst, of New York, and by photometric observations at Harvard Observatory.

Ballysodare, Co. Sligo:
May 4, 1886.